

S - SYSTEM SPECIFICATIONS

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OPTICS: 2 - 18" f/3.6 Baker-Schmidt systems

2 - Four-sided scanning mirror assemblies

COVERAGE: 126° Transverse Total (60 miles total)

60% Overlap in center 12 miles, at least 20% overlap in remainder

4000 n.mi. (1800 frames)

8° Convergence, minimum. More possible if IMC correction can be applied.

1.04 feet predicted detection

SIZE: Preliminary layout - Drawing No. 547-0002

WEIGHT: (Estimated): Glass 145, Film 60, System 625

FILM: 1 Cassette 27" Diam. x 9" thick, 7.2" wide x 4,300' SO-243 on thin base.

EXPOSURE: f/3.6 effective, T/8 (est.) including window with two gold coats and #12 filter, exposure 1/75 sec.*, slit 0.09 in. 1 frame (6-3/4" x 28-1/2") every 4.2 sec.

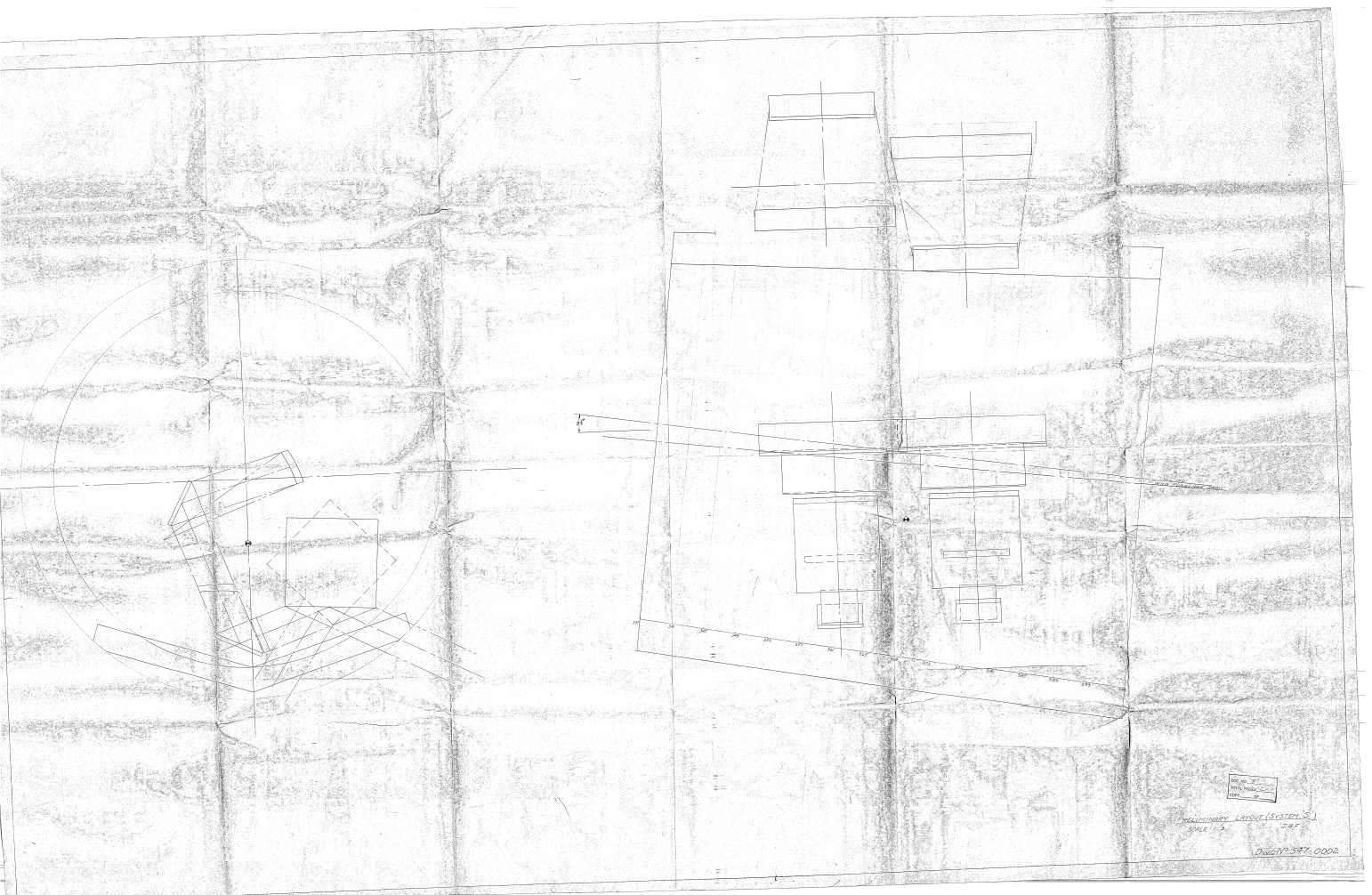
FILM VELOCITY: 6.7 in/sec average with about a 30% differential variation

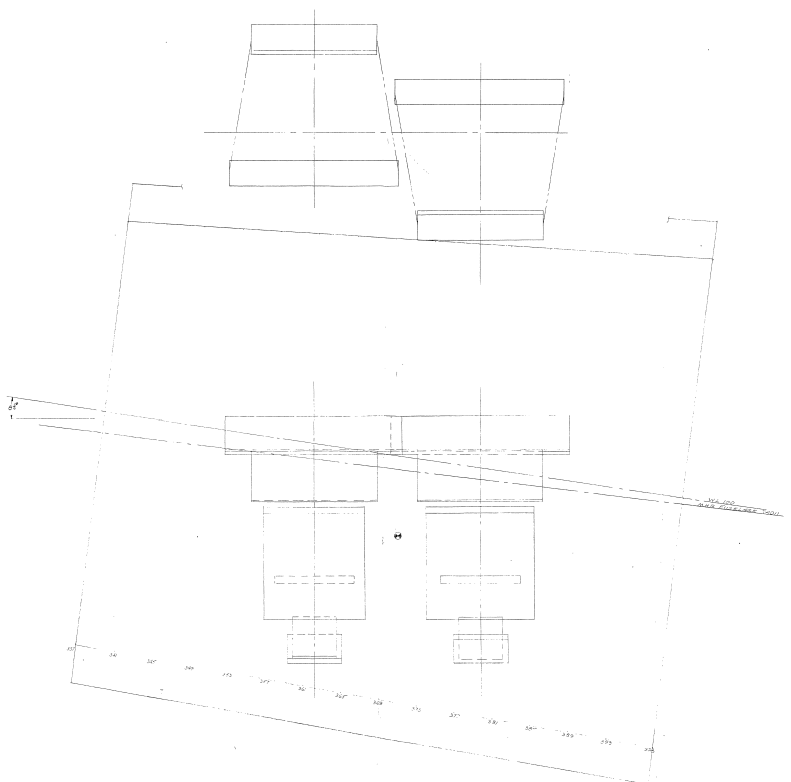
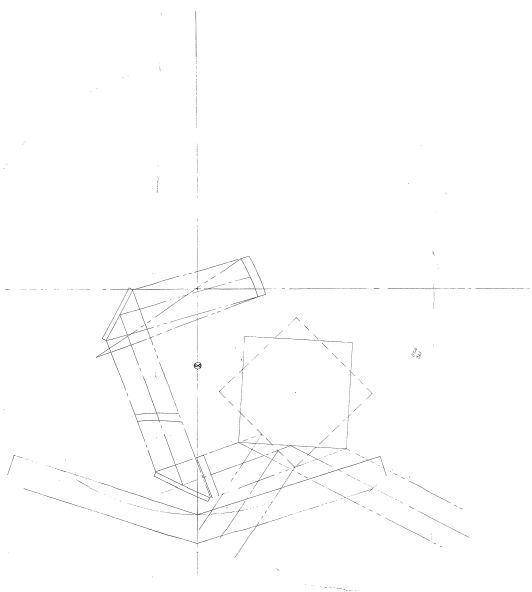
WINDOWS: 2, about 24" x 10" each. About 4 sec. available for cooling cycle.

IMC: Differential velocity adjustment of film and/or scanner assembly

* Based on EK intention to use SO-243 in an f/4 system with a #25 filter, it appears that 1/125 sec. is possible under our conditions.

M.D.R.
25 November 1959





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EXHIBIT 101-1 (SYSTEM S)
SCALE 1:1

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